

SPECIFICATIONS FOR MODEL AK-451

APPROVALS: FAA TSO C126 / C91a ELT
Emergency Locator Transmitter, type(AF)(AP)(S)
COSPAS SARSAT

PHYSICAL CHARACTERISTICS:

*Size and Weight:

Main unit: (4.27"Wx2.95"Hx5.64"L) 1lb 14 oz
Remote unit: (2.17"Wx1.20"Hx1.18"L) 1.0 oz
Blade/ Rod/ Whip antenna: (9"/ 18.5"/ 24" L) 1.4/ 0.5/ 0.25 Lbs
Portable antenna: (17"L) 4 oz
Coax Cable Assy: (6 ft) 5 oz
Aural Monitor: (0.7"Dia x 1"D) 0.3 oz
Mounting tray: (4.51"W x 0.75"H x 5.87"L) 4.0 oz

*Case and color:

High impact, fire resistant, waterproof, high temperature ABS plastic, safety international orange color.

GENERAL SPECIFICATIONS (STANDARD CONDITIONS):

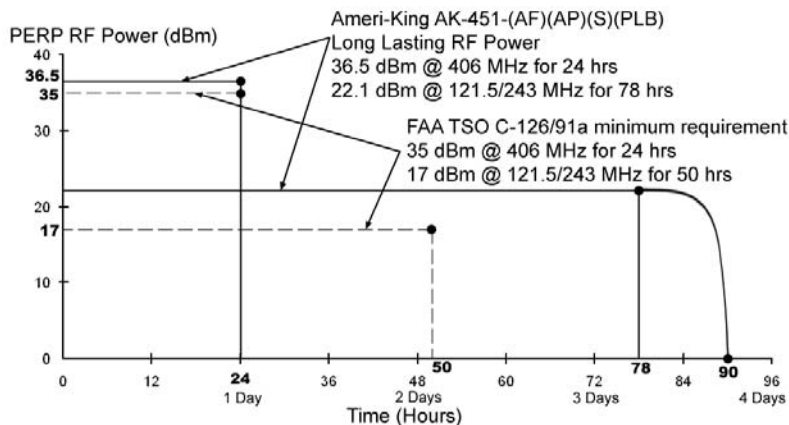
Operating frequencies: 406.028 +/- 0.001 MHz
243.0/ 121.5 MHz +/- 0.0025%

Transmitter Power Output:

5 W +/- 2 db @ 406 MHz, for 24 Hrs
22 +/-2 dBm @ 243 and 121.5 MHz, for 78 Hrs

Self Test: built-in with Failure detection flashing code number for Diagnostic Maintenance check: RF Output Power & Frequencies, Battery Low Voltage, ELT shuts down etc... .

OPERATING LIFE, 78 HRS @ -20 deg C @ End of 5 years Battery Life (TYP):



TYPICAL LIFE TEST @ -20 DEGREES C @ END OF 5-YEAR BATTERY LIFE

ENVIRONMENTAL TEST SPECIFICATIONS:

- * RTCA DO – 204A / 183 / 227
- * RTCA DO – 160E ENV.CAT F1XBA[204/183][204/183]XR[204/183]XXSZXXX(AC)204/183](BC)XXXX(C/204)
- * **TEMP. AND ALTITUDE:** Category F1
Low / High Temperature: -20 / +55 deg C (Operating)
-55 / +85 deg C (Storage)
Altitude: 55,000 feet
- * **AUTOMATIC CRASH ACTIVATION:**
Velocity change of 2.3 +/- 0.3G (4.5 +/- 0.5 fps)
- * **CRASHWORTHINESS:** 100G, 23 ms, 6 directions

INSTALLATION LOCATION:

Tail or Cockpit/ Cabin installation with dual or single Antennas.

PROGRAMMING CODING PROTOCOLS:

Worldwide, all available ELT Protocols in Long and Short Messages (Standard/National/User)

Location Protocol (Long): Standard Location ELT
ELT with A/C 24 Bit Address; ELT with A/C Operator Designator; ELT with Serial No.; National Location.

User-Location Protocol (Long): Aviation; ELT with Serial No.; ELT with A/C Operator Designator & Serial No.; ELT with A/C 24 Bit Address.

User Protocol (Short): Aviation; ELT with Serial No.; ELT with A/C Operator Designator & Serial No.; ELT with A/C 24 Bit Address.

GPS/NAV POSITION INTERFACES:

Interface with External a/c GPS/NAV, via RS-232 Aviation Protocol:

Garmin Int'l Inc 500/400/300/200/100 Series
Honeywell Bendix King KLN 900/90B/94/89B/88 etc
Trimble Nav Inc. NAV1000/2000, TNL2100/3100 etc
Arnav Inc. R50/50i, STAR 5000, FMS5000, MFD etc
II Morrow Inc. Flybuddy, 2001 NMS etc....

ACCESORIES SUPPLIED:

Lithium Batteries Package, **Ultra Long 78 Hrs**, LiMnO₂, or LiSO₂; Portable Antenna, aircraft Fixed Antenna, Coax Cable Assembly, Remote Control Panel, Wiring Interconnect Assembly, Audible Monitor, Mounting Tray, Velcro holder, Hex Key Tool. All of the accessories are provided and may be ordered extra separately.

WARRANTY:

Two (2) years. Optional extended four (4) years. Lifetime warranty includes no charge for the electronic components. After the warranty has expired, customers shall pay only the labor repair cost.

HOW TO ORDER:

AK-451-(AF)(AP)/Whip/Portable: ELT, 406/243/121.5MHz, Dual Ants

AK-451-(AF)(AP)/Rod/Portable: ELT, 406/243/121.5MHz, Dual Ants.

AK-451-(AF)(AP)/Blade/Portable: ELT, 406/243/121.5MHz, Dual Ants.

AK-451-(AF)(AP)/GPS/Whip/Portable: ELT, 406/243/121.5MHz with GPS/NAV Position, Dual Antennas, Whip/Portable.

AK-451-(AF)(AP)/GPS/Rod/Portable: ELT, 406/243/121.5MHz with GPS/NAV Position, Dual Antennas, Rod/Portable.

AK-451-(AF)(AP)/GPS/Blade/Portable: ELT, 406/243/121.5MHz with GPS/NAV Position, Dual Antennas, Blade/Portable.

AK-451-(AP): ELT Auto Portable, 406/243/121.5 MHz.

AK-451-(S): ELT Survival, 406/243/121.5 MHz.

AK-451-(AF)(AP) /450000-1: ELT w Optional Multi Axes (5 Axes) G switch, for helicopters, 406/243/121.5MHz, Dual Ants.

AK-451-(AF)(AP) /GPS/450000-1: ELT w GPS & Optional Multi Axes (5 Axes) G switch, for helicopters, 406/243/121.5MHz, Dual Ants.

IK-451(-): Installation Adapter Kit for ACK/Pointer/Narco/Artex/Kannad

451017-1B: Antenna, Whip type, Gen Aviation, 250knots, 406/121.5MHz

451017-2A: Antenna, Rod type, Business Jet aircraft, 350 knots, 406/243/121.5 MHz.

451017-3A: Antenna, Blade type, Transport aircraft, 1.0 Mach, 406/243/121.5 MHz.

451017-4S: Antenna, Portable Hand Use.

4500010-1: Battery Package, Lithium, LiMnO₂, 90 Hrs lasting.

4500010-2: Battery Package, Lithium, LiSO₂, 87 Hrs lasting

T-451: Test Set and ELT Coding Equipment for AK-451

